

DEPARTMENT OF THE AIR FORCE 59TH MEDICAL WING (AETC) JOINT BASE SAN ANTONIO - LACKLAND TEXAS



12 APR 2017

MEMORANDUM FOR ST

ATTN: SANDRA VALTIER

FROM: 59 MDW/SGVU

SUBJECT: Professional Presentation Approval

- 1. Your paper, entitled Benzodiazepine Use Among Low Back Patients Concurrently Prescribed Opioids in the Military Health System Between 2010 or 2013 presented at/published to San Antonio Military Health System and Universities Research Forum (SURF), San Antonio, TX, 16 June 2017 in accordance with MDWI 41-108, has been approved and assigned local file #17179.
- 2. Pertinent biographic information (name of author(s), title, etc.) has been entered into our computer file. Please advise us (by phone or mail) that your presentation was given. At that time, we will need the date (month, day and year) along with the location of your presentation. It is important to update this information so that we can provide quality support for you, your department, and the Medical Center commander. This information is used to document the scholarly activities of our professional staff and students, which is an essential component of Wilford Hall Ambulatory Surgical Center (WHASC) internship and residency programs.
- 3. Please know that if you are a Graduate Health Sciences Education student and your department has told you they cannot fund your publication, the 59th Clinical Research Division may pay for your basic journal publishing charges (to include costs for tables and black and white photos). We cannot pay for reprints. If you are a 59 MDW staff member, we can forward your request for funds to the designated Wing POC at the Chief Scientist's Office, Ms. Alice Houy, office phone: 210-292-8029; email address: alice.houy.civ@mail.mil.
- 4. Congratulations, and thank you for your efforts and time. Your contributions are vital to the medical mission. We look forward to assisting you in your future publication/presentation efforts.

LINDA STEEL-GOODWIN, Col, USAF, BSC Director, Clinical Investigations & Research Support

hinda Steel-Goodwin

PROCESSING OF PROFESSIONAL MEDICAL RESEARCH/TECHNICAL PUBLICATIONS/PRESENTATIONS

INSTRUCTIONS USE ONLY THE MOST CURRENT 59 MDW FORM 3039 LOCATED ON AF E-PUBLISHING

- 1. The author must complete page two of this form:
 - a. In Section 2, add the funding source for your study (e.g., 59 MDW CRD Graduate Health Sciences Education (GH3E) (3G5 O&M); 3G5 R&D; Tri-Service Nursing Research Program (TSNRP); Defense Medical Research & Development Program (DMRDP); NiH; Congressionally Directed Medical Research Program (CDMRP); Grants; etc.)
 - b. In Section 2, there may be funding available for journal costs, if your department is not paying for figures, tables or photographs for your publication. Please state "YES" or "NO" in Section 2 of the form, if you need publication funding support.
- Print your name, rank/grade, sign and date the form in the author's signature block or use an electronic signature.
- 3. Attach a copy of the 59 MDW IRB or IACUC approval letter for the research related study. If this is a technical publication/presentation, state the type (e.g. case report, QA/QI study, program evaluation study, informational report/briefing, etc.) in the "Protocol Title" box.
- 4. Attach a copy of your abstract, paper, poster and other supporting documentation.
- 5. Bave and forward, via email, the processing form and all supporting documentation to your unit commander, program director or immediate supervisor for review/approval.
- On page 2, have either your unit commander, program director or immediate supervisor.
 - a. Print their name, rank/grade, title; sign and date the form in the approving authority's signature block or use an electronic signature.
- 7. Submit your completed form and all supporting documentation to the CRD for processing (59crdpubspres@us.af.mil). If you have any questions or concerns, please contact the 59 CRD/ Publications and Presentations Section at 292-7141 for assistance.
- 8. The 59 CRD/Publications and Presentations Section will route the request form to clinical investigations, 502 ISG/JAC (Ethics Review) and Public Affairs (59 MDW/PA) for review and then forward you a final letter of approval or disapproval.
- 9. Once your manuscript, poster or presentation has been approved for a one-time public release, you may proceed with your publication or presentation submission activities, as stated on this form. Note: For each new release of medical research or technical information as a publication/presentation, a new 59 MDW Form 3039 must be submitted for review and approval.
- 10. If your manuscript is accepted for scientific publication, please contact the S9 CRD/Publications and Presentations Section at 292-7141. This information is reported to the 59 MDW/CC. All medical research or technical information publications/presentations must be reported to the Defense Technical Information Center (DITC). See 59 MDWI 41-108, Presentation and Publication of Medical and Technical Papers, for additional information.
- NOTE: All abstracts, papers, posters, etc., should contain the following disclaimer statement:
 - "The views expressed are those of the (author(s)) (presenter(s)) and do not reflect the official views or policy of the Department of Defense or its Components*
- NOTE: All abstracts, papers, posters, etc., should contain the following discialmer statement for research involving humans:
 - "The voluntary, fully informed consent of the subjects used in this research was obtained as required by 32 CFR 219 and DODI 3216.02 AFI 40-402."
- NOTE: All abstracts, papers, posters, etc., should contain the following discialmer statement for research involving animals, as required by AFMAN 40-401 IP
 - "The experiments reported herein were conducted according to the principles set forth in the National Institute of Health Publication No. 80-23. Guide for the Care and Use of Laboratory Animals and the Animal Welfare Act of 1966, as amended."

| PROCESSING OF PROFESSIONAL MEDICAL RESEARCH/TECHNICAL PUBLICATIONS/PRESENTATIONS | | | | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------------------------------|--|
| To: CUNICAL RESEARCH 2. FROM: (Aut Sandra Valtie) | | , Office | e Symbol) | 3. GME/GHBE 8 | | PROTOCOL NUMBER: WA0001750 | |
| PROTOCOL TITLE: (NOTE: For each new release of medical research or technical information as a publication/presentation, a new 59 MDW Form 3039 | | | | | | | |
| must be submitted for review and approval.) Identification of Risk Factors That Predict Long-Term Opioid Use and Subsequent Adverse Effects | | | | | | | |
| 6. TITLE OF MATERIAL TO BE PUBLISHED O | R PRESENTED: | | | | | | |
| Benzodiazepine Use Among Low Back Pain Patients Concurrently Prescribed Opioids in the Military Health System Between 2012 or 2013 | | | | | | | |
| 7. FUNDING RECEIVED FOR THIS STUDY? X YES NO FUNDING SOURCE: | | | | | | | |
| 9. DO YOU NEED FUNDING SUPPORT FOR PUBLICATION PURPOSES: YES X NO | | | | | | | |
| 9. IS THIS MATERIAL CLASSIFIED? YES NO | | | | | | | |
| 10. IS THIS MATERIAL SUBJECT TO ANY LEGAL RESTRICTIONS FOR PUBLICATION OR PRESENTATION THROUGH A COLLABORATIVE RESEARCH AND DEVELOPMENT AGREEMENT (CRADA), MATERIAL TRANSFER AGREEMENT (MTA), INTELLECTUAL PROPERTY RIGHTS AGREEMENT ETC.? YES X NO NOTE: If the answer is YES then attach a copy of the Agreement to the Publications/Presentations Request Form. | | | | | | | |
| 11. MATERIAL IS FOR: X DOMESTIC RELE | 80,000 | | | | | | |
| CHECK APPROPRIATE BOX OR BOXES FOR APPROVAL WITH THIS REQUEST. ATTACH COPY OF MATERIAL TO BE PUBLISHED/PRESENTED. 11a. PUBLICATION/JOURNAL (List Intended publication/journal.) | | | | | | | |
| 11b. PUBLISHED ABSTRACT (List intended journal.) | | | | | | | |
| 11c. POSTER (To be demonstrated at meeting: name of meeting, city, state, and date of meeting.) | | | | | | | |
| 11d. PLATFORM PRESENTATION (At chillan institutions: name of meeting, state, and date of meting.) | | | | | | | |
| Man Antonio Military Health System and Universities Research Forum (SURF), San Antonio, Tx, 16 June 2017 | | | | | | | |
| 12. EXPECTED DATE WHEN YOU WILL NEED THE CRD TO SUBMIT YOUR CLEARED PRESENTATION/PUBLICATION TO DTIC NOTE: All publications/presentations are required to be placed in the Defense Technical Information Center (DTIC). | | | | | | | |
| DATE | | | | | | | |
| | | | | | | NIGHED LEED WILLIED | |
| 13. 59 MDW PRIMARY POINT OF CONTACT (Last Name, First Name, M.I., email) | | | mai/ | 14. DUTY PHONE/PAGER NUMBER 292-0504 | | | |
| Valtier, Sandra sandra valtier civ@mail.mil 292-0504 15. AUTHORSHIP AND CO-AUTHOR(8) List in the order they will appear in the manuscript. | | | | | | | |
| LAST NAME, FIRST NAME AND M.I. | GRADE/RANK | r — | QUADRON/GROUP/OF | FICE SYMBOL | INSTIT | TUTION (If not 59 MDW) | |
| a. Primary/Corresponding Author Megan Curtis | MA | | | | UTHS | | |
| b. William Kazanis | мs | | | UTHSCSA | | | |
| c. Claudina Tami | MS | | | UTHSCSA | | | |
| d. Joseph Maddry | Maj | SAM | SAMMC | | USAF | USAF | |
| e. V Bebarta | MD | | | | UC De | UC Denver/Air Natnl Guard | |
| f. Jennifer Potter | PhD, MPH | | UTHSCSA | | | | |
| I CERTIFY ANY HUMAN OR ANIMAL RESEARCH RELATED STUDIES WERE APPROVED AND PERFORMED IN STRICT ACCORDANCE WITH 32 CFR 219, AFMAN 40-401_IP, AND 59 MDWI 41-108. I HAVE READ THE FINAL VERSION OF THE ATTACHED MATERIAL AND CERTIFY THAT IT IS AN ACCURATE MANUSCRIPT FOR PUBLICATION AND/OR PRESENTATION. | | | | | | | |
| 15. AUTHOR'S PRINTED NAME, RANK, GRADE | | | 17. AUTHOR'S SIGNA | Service and the control of the contr | | | |
| Sandra Valtier, GS13 | | VALTER SANDRA 1230006 | March 21, 2017 | | | | |
| 19. APPROVING AUTHORITY'S PRINTED NAME, RANK, TITLE Kevin Steel, Lt Col, Deputy Chief Scientist | | 20. APPROVING AUTI STEEL KEVIN E 11622665 | March 21, 2017 | | | | |

| PROCESSING OF PROFES | SIONAL MEDICAL P | RESEARCH/TECHNICAL PUBLICATIONS/PR | ESENTATIONS | | | |
|------------------------------------------------------------------------------------|------------------------------------|-----------------------------------------------|-----------------------------------|--|--|--|
| 1st ENDORSEMENT (68 MDW/8GVU Use O | nty) | | | | | |
| TO: Clinical Research Division 59 MDW/CRD Contact 292-7141 for email instructions. | 22. DATE RECEIVED 31 March 2017 | 23. ASSIGNED PROCESSING REQUEST FILE 17179 | NUMBER | | | |
| 24. DATE REVIEWED | | 25. DATE FORWARDED TO 502 ISGUAC | 25. DATE FORWARDED TO 502 ISG/JAC | | | |
| April 12, 2017 | | | | | | |
| | ENDED OR NECESSARY | CHANGES: NO X YES If yes, give date. April 07 | , 2017 N/A | | | |
| | BAPPROVED | | | | | |
| Presentation of IRB approved research s | ub-analysis with approp | riate disclaimers. Approved | | | | |
| 28. PRINTED NAME, RANK/GRADE, TITLE | OF REVIEWER | 29. REVIEWER SIGNATURE | 30. DATE | | | |
| Kevin Kupferer/GS13/Human Research | Subject Protection Expe | ET KUPTERER KEVIN R. 1086887270 | April 12, 2017 | | | |
| 2nd ENDORSEMENT (602 ISG/JAC Use On | ly) | | | | | |
| 31. DATE RECEIVED |). | 32. DATE FORWARDED TO 59 MDW/PA | 32. DATE FORWARDED TO 59 MDW/PA | | | |
| | 30 | | | | | |
| 34. PRINTED NAME, RANK/GRADE, TITLE | OF REVIEWER | 35. REVIEWER SIGNATURE | 36. DATE | | | |
| 3rd ENDOR 8 EMENT (68 MDW/PA Use Only |) | | • | | | |
| 37. DATE RECEIVED | | 38. DATE FORWARDED TO 59 MDW/8GVU | | | | |
| April 12, 2017 | | April 12, 2017 | April 12, 2017 | | | |
| 39. COMMENTS APPROVED (in com | pliance with security and po | olicy review directives.) DIBAPPROVED | | | | |
| 40. PRINTED NAME, RANK/GRADE, TITLE | OF REVIEWER | 41. REVIEWER SIGNATURE | 42. DATE | | | |
| Kevin Iinuma, SSgt/E-5, 59 MDW Publ | ic Affairs | ENLMA KEVINIMITSUGU 1290227 STEPRIN 1990 513 | April 12, 2017 | | | |
| 4th ENDORSEMENT (69 MDW/SGVU Use C | nly) | | | | | |
| 43. DATE RECEIVED | 1 229 12 | SENIOR AUTHOR NOTIFIED BY PHONE OF APPROVA | NL OR DISAPPROVAL LEFT MESSAGE | | | |
| 45. COMMENTS APPROVED DIS | BAPPROVED | | | | | |
| 46. PRINTED NAME, RANK/GRADE, TITLE OF REVIEWER | | 47. REVIEWER SIGNATURE | 48. DATE | | | |

BENZODIAZEPINE USE AMONG LOW BACK PAIN PATIENTS CONCURRENTLY PRESCRIBED OPIOIDS IN THE MILITARY HEALTH SYSTEM BETWEEN 2012 OR 2013

Megan Curtis, MA¹, William Kazanis, MS¹,², Claudina Tami, BS¹, Mary Jo Pugh, PhD RN¹,², Don McGeary, PhD¹, Erin P. Finley, PhD, MPH², Maj Joseph Maddry, MD³,6,8, Vik Bebarta, MD³,7, David Carnahan, MD⁴,8, Jennifer Sharpe Potter, PhD MPH¹

¹The University of Texas Health Science Center at San Antonio, ² South Texas Veterans Health Care System, ³San Antonio Military Medical Center, ⁴Defense Health Agency, ⁵United States Air Force Medical Support Agency, ⁶San Antonio Uniformed Services Health Education Consortium, ⁷University of Colorado

Background: Dramatic increases in the amount of opioids prescribed for chronic non-cancer pain, particularly low back pain, exist among those served by the military health care system. The combination of opioids and benzodiazepines poses numerous safety risks for the patient including respiratory suppression, oversediation, and overdose. In a large national sample of veterans, risk of fatal overdoses increased when opioids and benzodiazepines were concurrently prescribed. Despite the justified concerns regarding the abuse liability and the long-term safety and efficacy of opioids for chronic pain, they continue to be commonly prescribed with benzodiazepines. For example, one study report that 18-38% of patients with an opioid prescription received a benzodiazepine. These high-risk prescribing patterns have contributed to the fatal overdose epidemic. There is scant evidence regarding opioid and benzodiazepine prescribing practices among active duty service members with low back pain. It is important to understand factors associated with benzodiazepine use in this population to identify those most vulnerable to safety issues. To this end, we investigated factors associate with concurrent opioid and benzodiazepine prescribing among active duty service members with nonmalignant low back pain who started their first opioid episode in 2012 or 2013.

Materials and Methods: Study population included active duty service members: (1) not deployed at the time of care, (2) diagnosed with non-malignant low back pain and (3) received their first documented opioid prescription in the military health system in 2012 or 2013. Analyses were conducted on a de-identified dataset created by the Data Discovery, Analytics, and Research (DDAR) team within the Enterprise Intelligence Section (EI) within the Defense Health Agency (DHA) that was derived from the Military Health System Mart (M2). The dataset was approved by the institutional and Department of Defense regulatory agencies. A logistic regression analysis was conducted to examine the use of benzodiazepine with the following variables: sociodemographics, opioid characteristics, psychiatric and physical factors.

Results: The cohort was 42,253 active duty service members receiving opioids with a low back pain diagnosis. Overall, the sample was predominantly male (78.54%), and half were between the ages of 18-25 years olds (50.04%). The most common service branch was Army (51.72%). Results from logistic regression analysis indicated individuals prescribed a benzodiazepine were significantly more likely to be prescribed at least one long acting opioid: 1.71 CI[1.46, 1.99] versus short-acting, receive chronic opioid therapy

(>90 days): 2.39 CI[2.24, 2.56], and also have been prescribed an antidepressant: 2.07 CI[1.89, 2.28]. Additionally, those prescribed a benzodiazepine were significantly more likely to be diagnosed with a substance use disorder: 1.29 CI[1.13, 1.47].

Conclusion: Our findings suggest that differences in patient characteristics across a variety of domains may raise safety concerns and quality of care issues. The results are consistent with previous findings among both US veterans and civilian populations. To our knowledge, this is among the first to examine factors associated with benzodiazepine use in a low back pain population receiving opioids.

Keywords: opioids, benzodiazepine, and low back pain

Acknowledgements and Funding: Funding received through the Substance Abuse Working Group (SAWG) of the Joint Program Committee 5 (JPC-5) / Military Operational Medicine Research Program (MOMRP), US Army Medical Research and Materiel Command (USAMRMC), #FA8650-15-C-658.

The views expressed are those of the author and do not reflect the official views or policy of the Department of Defense, Department of Veterans Affairs, or its Components.